Organizational Impact and Opportunities of the Internet Economy

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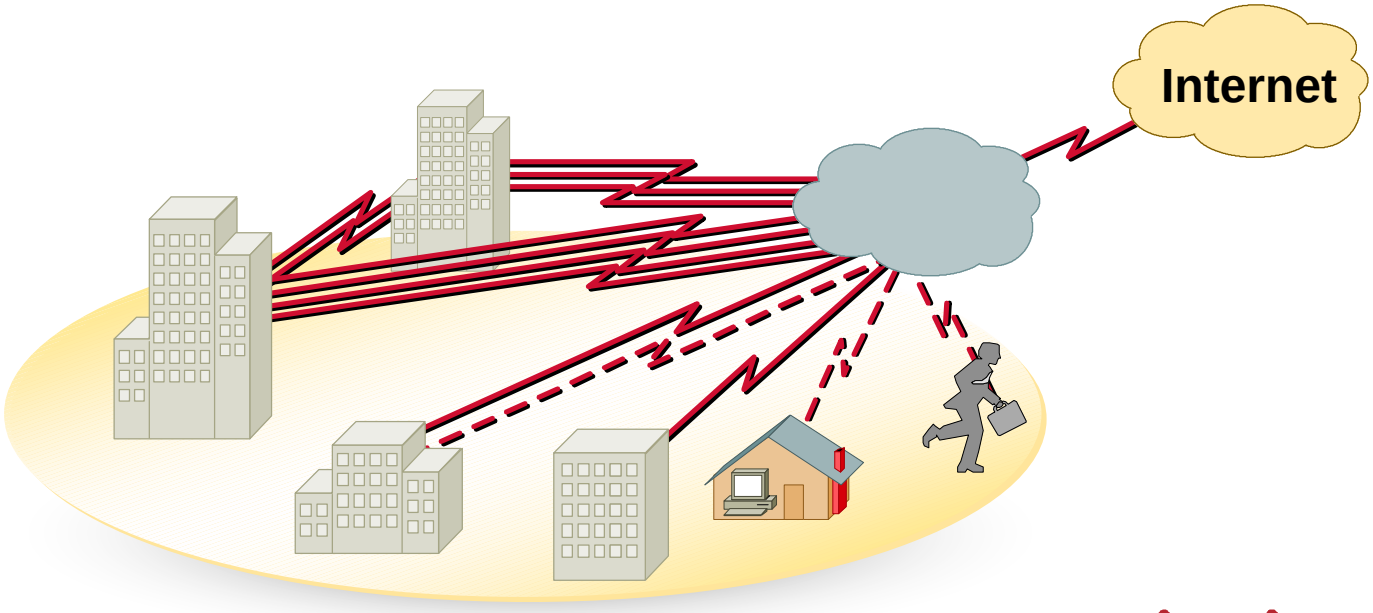
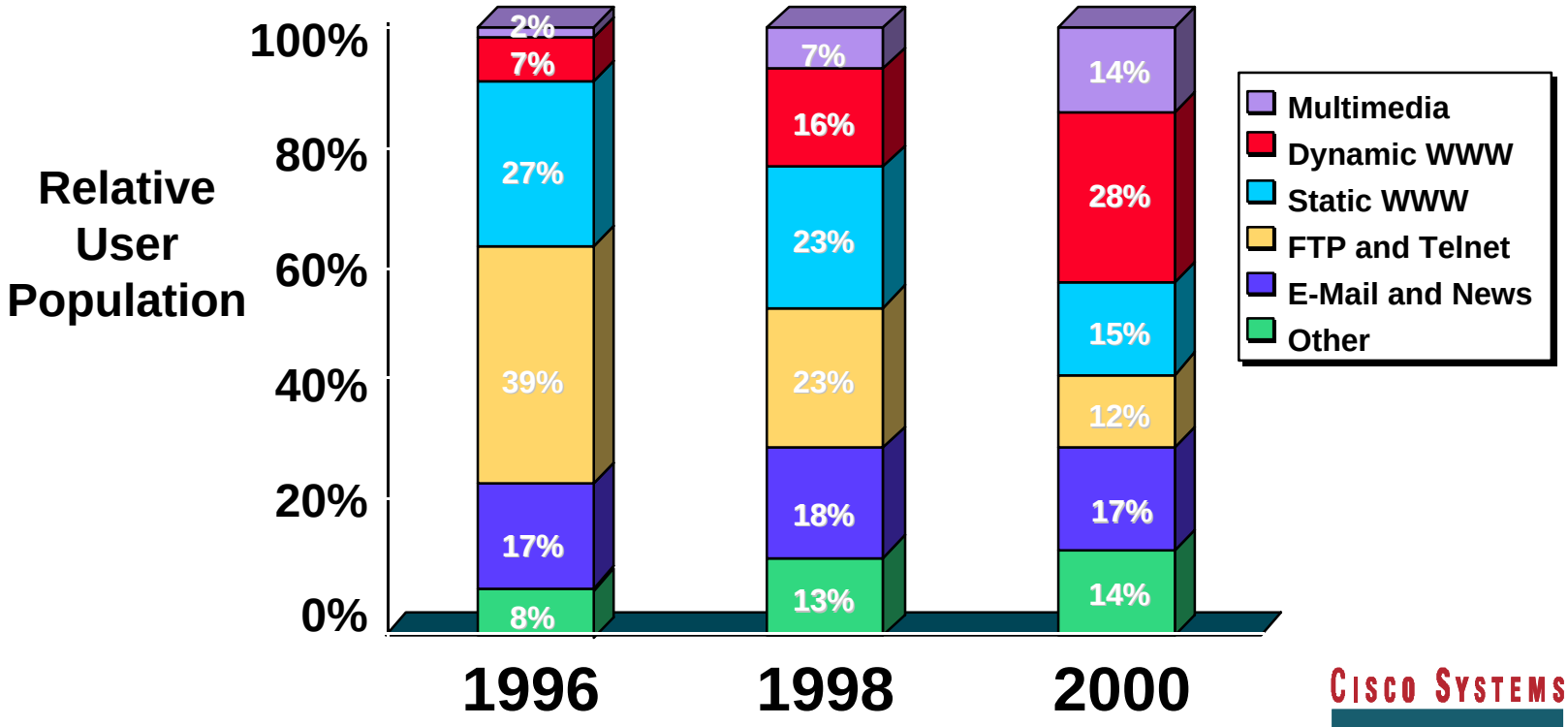
Important Internet Trends



Internet Traffic Mix Shifting

To Transactional Pages (Red) and Audio/Video Content (Purple)



Source: The Yankee Group, 1996

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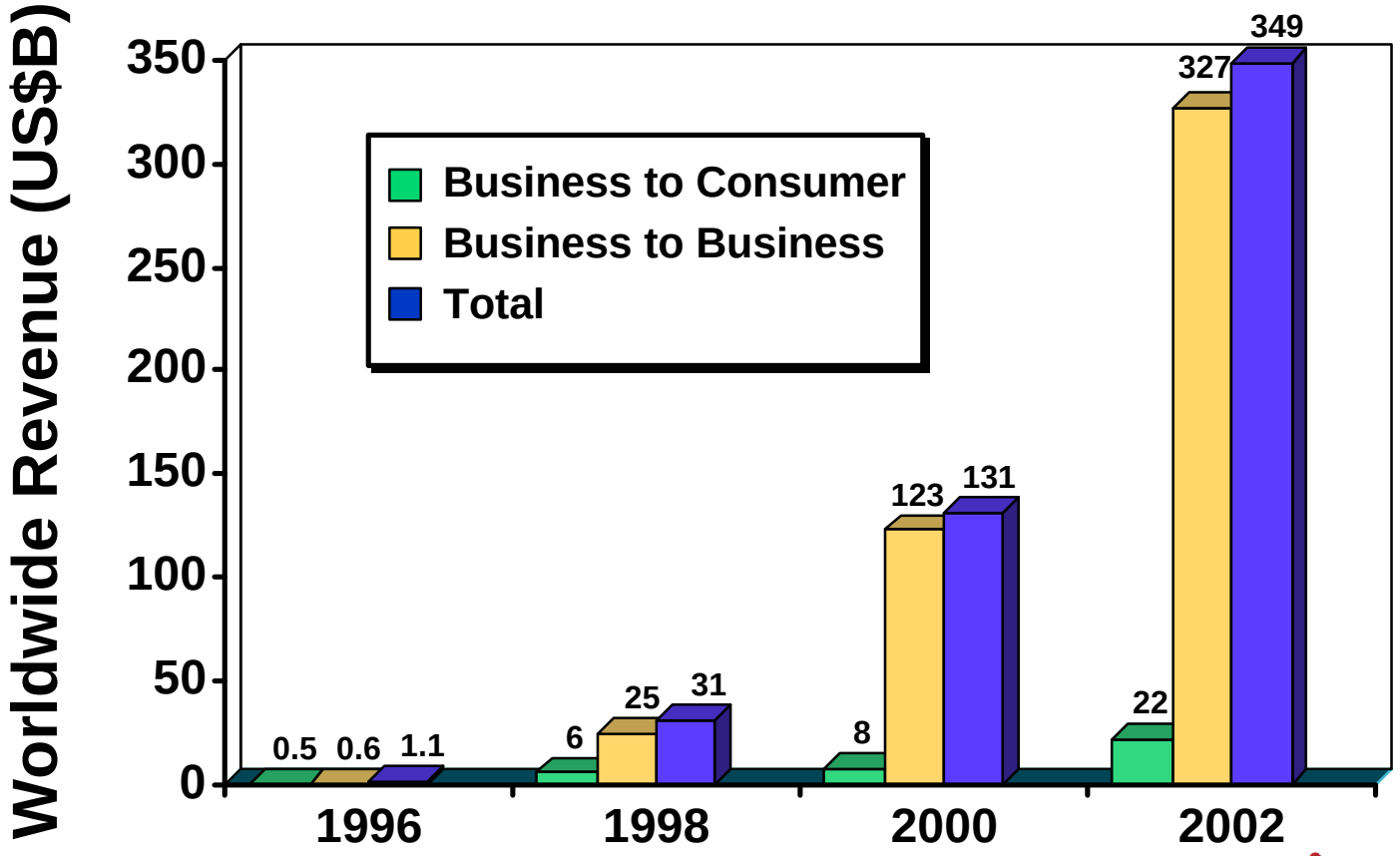
Trendsetting Transactions in the Internet Economy

Traditional Business	Inefficiencies Removed	Trendsetters
Brokerage 	Intermediation (Broker) Fees	E*TRADE $120 Billion in Assets
Purchasing (Manufacturing) 	Sourcing by Fax and Phone	  Purchasing Cost Reduced by $700 Million in Three Years
Bookstores 	Bricks and Mortar	amazon.com 2.5 Million Virtual Customers

Rapid I-Commerce Growth



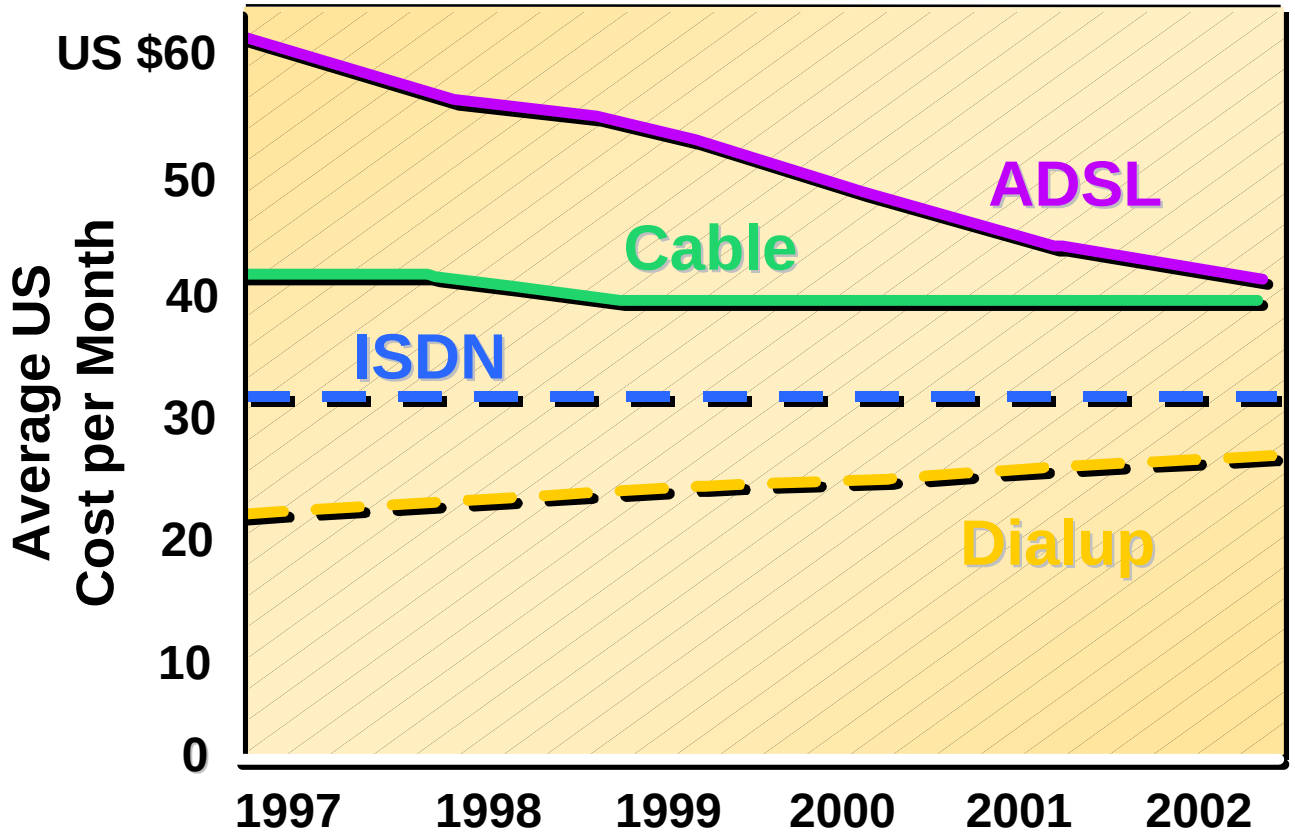
Source: Forrester Research

Internet Advertising Rising

- $0 in 1993.
- $300 million in 1996.
- $3.7 billion in 1999.

Source: Jupiter

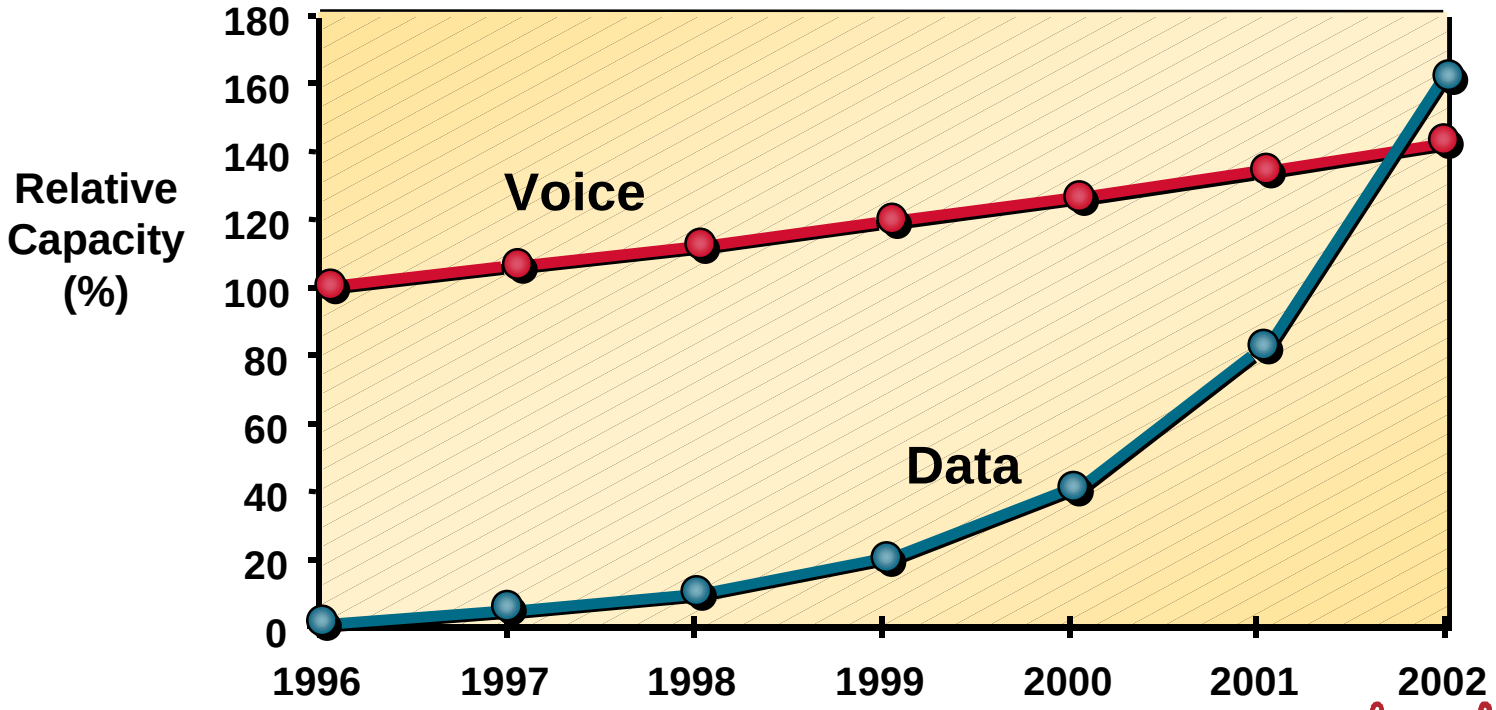
Home Access: Faster Getting Cheaper



Source: Forrester Research, January 1998

Data Overtaking Voice

- **International data traffic to North America already exceeds international voice from Australia and Scandinavia.**



Source: MCI (Vint Cerf), 1997

AT&T Offers Consumer VoIP!

AT&T

September 16, 1998

Think you're getting a

great long distance rate?

How about

7½¢ a minute?

Bruce Nelson
556 Sandy Way

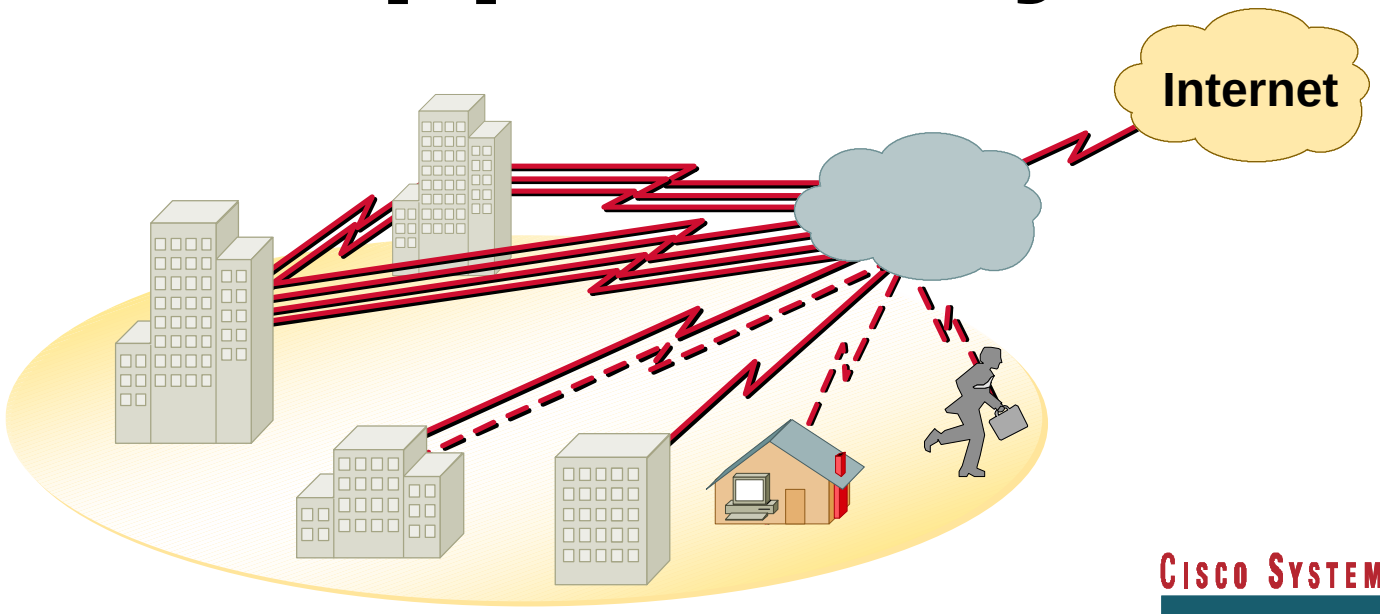
Dear Bruce Nelson:

How would you like a basic, no-frills long distance service that lets you call anywhere in the United States whenever you feel like it for 7½¢ a minute?* Sounds pretty far-fetched, right? Then you probably haven't heard about AT&T **Connect 'N Save**® Service.

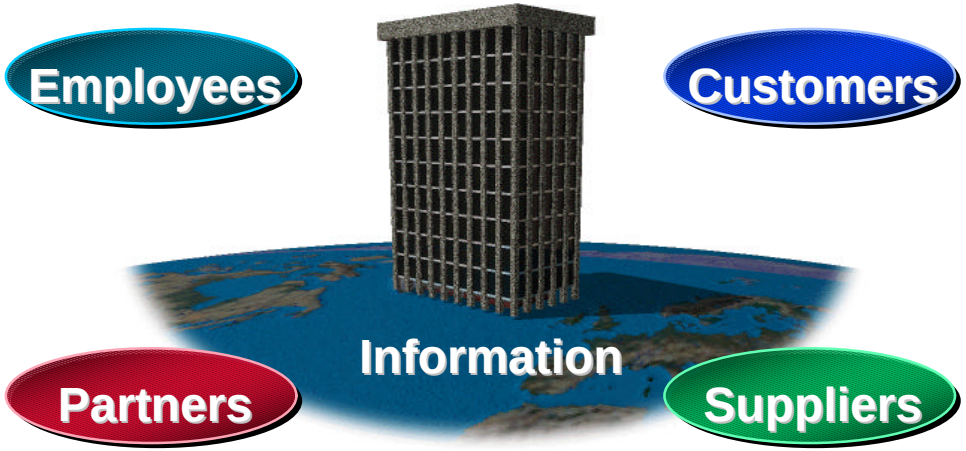
Here's how it works.

All you need to make a call with AT&T **Connect 'N Save** Service is your regular touch-tone telephone. AT&T **Connect 'N Save** Service uses our world-class Internet technology instead of standard telephone circuits to transmit your voice. Since that costs us less, we pass the savings on to you.

Internet Economy: The Opportunity

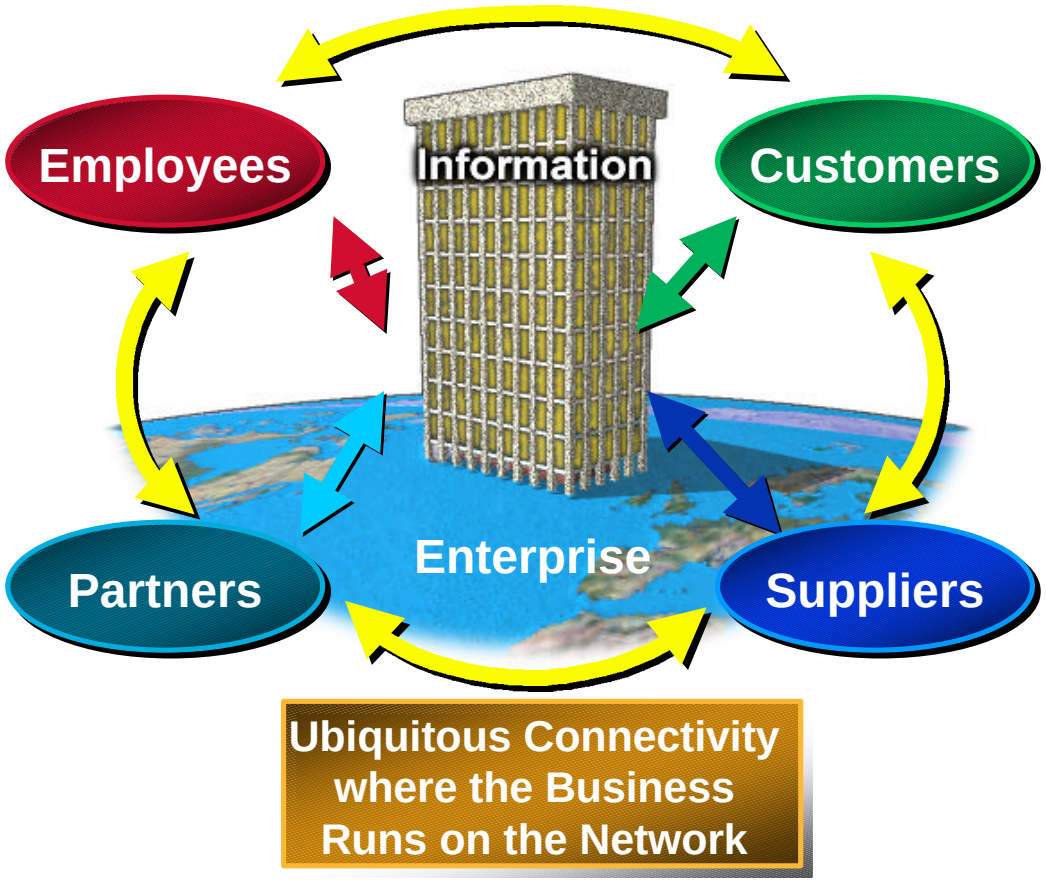


Businesses Facing New Challenges



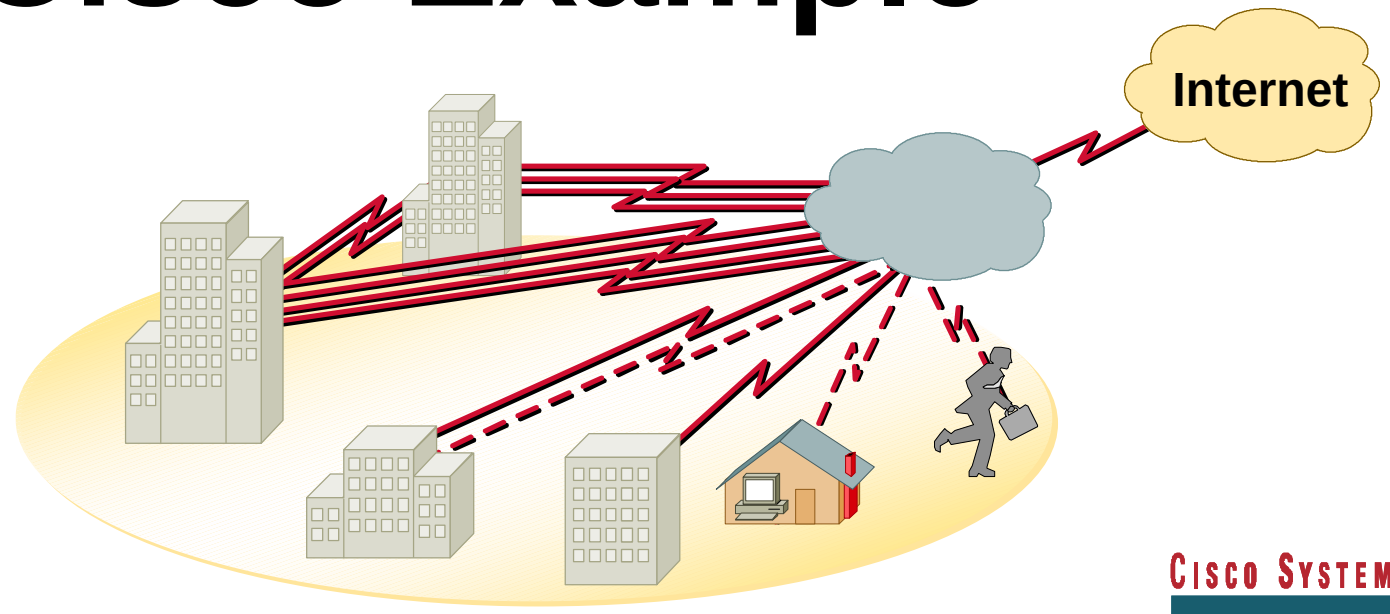
- Competition is intense and usually international in scope.
- Pace of business is accelerating; time to market demands are extreme.
- Global info access is crucial.

“Internet Business” IT for Competitive Advantage



- More “personal” and rapid customer service.
- Greater accuracy.
- Competitive agility.
- Higher productivity; lower costs.
- Faster time to market.
- Time-zone and geography independence.

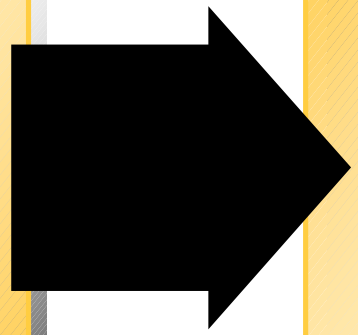
Internet Organizations: Cisco Example



Cisco's Web Business Rationale

Challenge

- Scale the company.
- Maintain high-quality customer support and enhance satisfaction.
- Maximize return to shareholder in times of:
  - Rapid growth.
  - Technology change.
  - Acquisitions.
  - Shortage of experts.

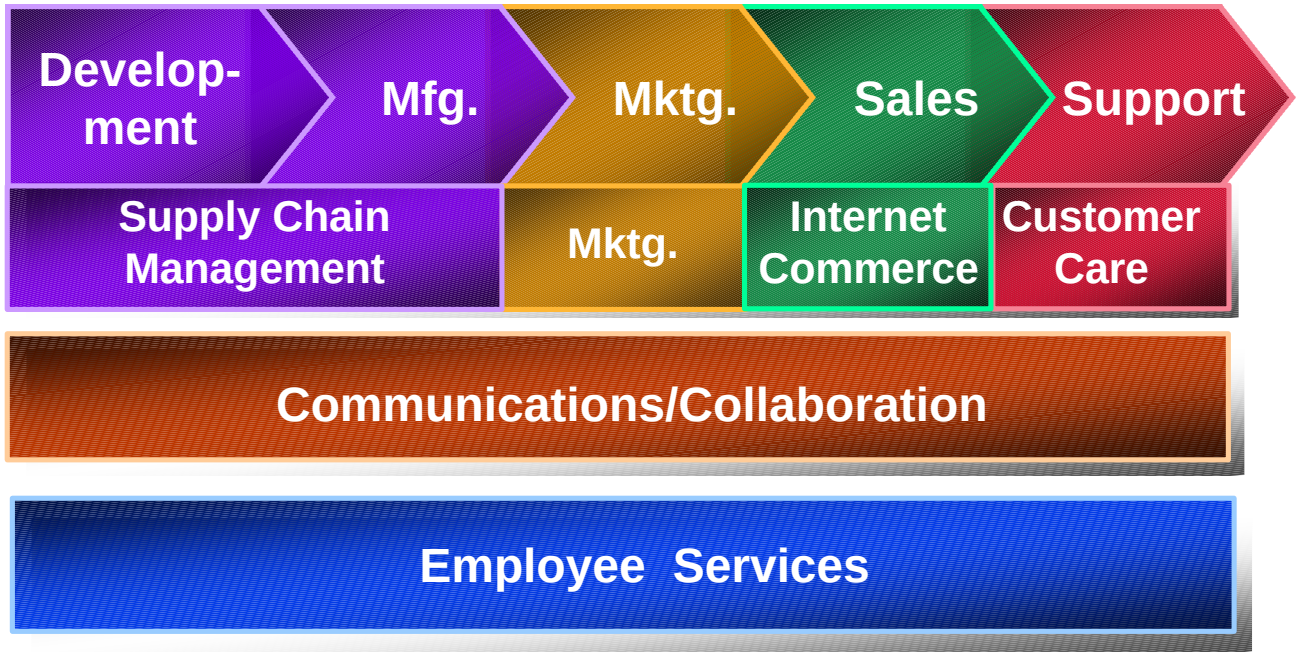


Results

- Dramatic competitive advantage through:
  - Higher customer satisfaction.
  - Faster time to market.
  - Lower expenses.
  - Shorter lead times.
  - Increased responsiveness.
  - Better ROI.

Cisco's Web-Business Approach

CCO: Cisco Connection Online: Internet



CEO: Cisco Employee Connection: Intranet

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CCO Customer Care

Cisco Connection Online

- Installation and Configuration Documentation
- Operation Support Software Library
- Problem Detection: CiscoWorks
- Problem Identification: Bug Navigator
- Problem Notification: Bug Alerts
- Problem Resolution: Open Forum, Troubleshooting Engine

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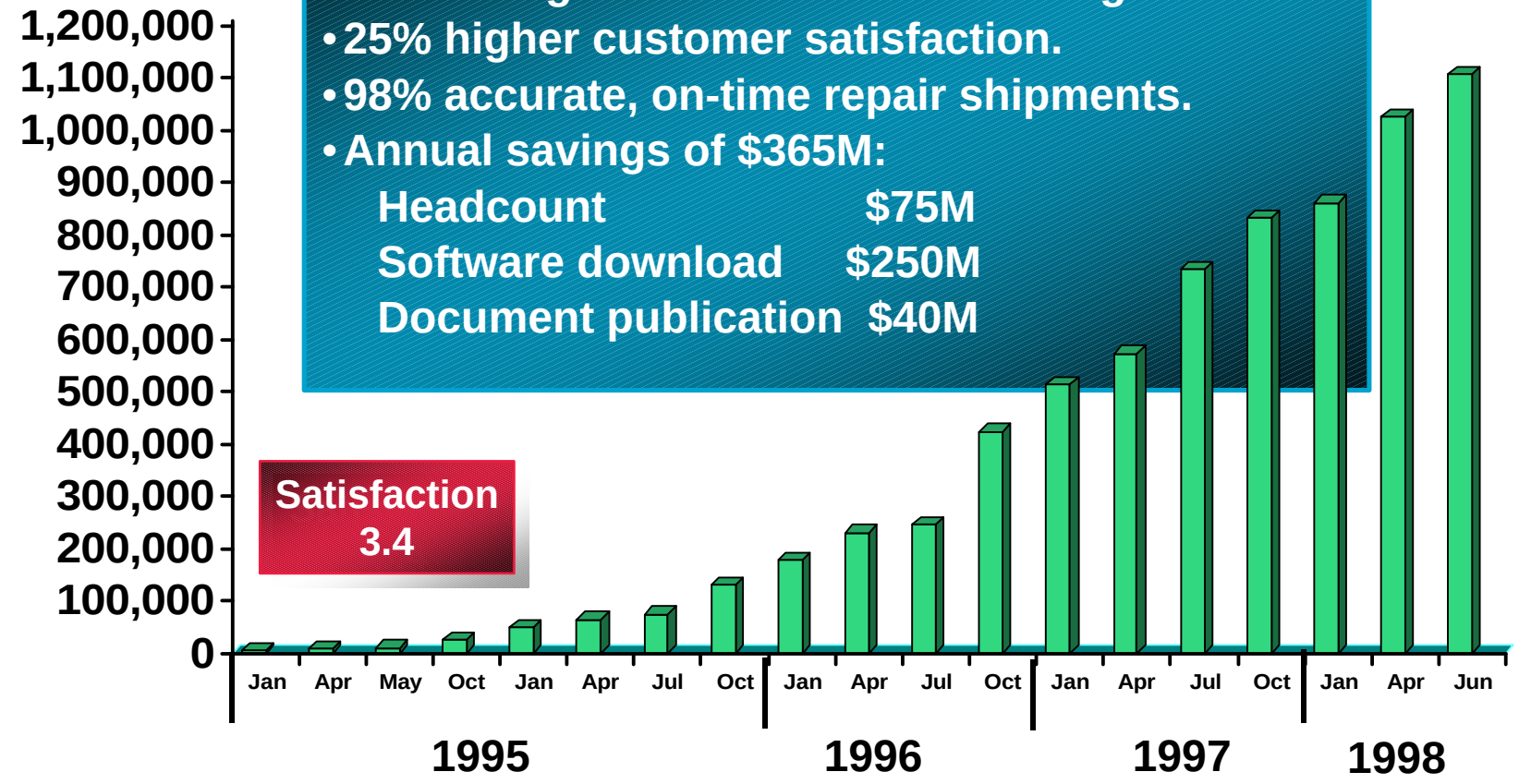
Customer Care Results

June 1998

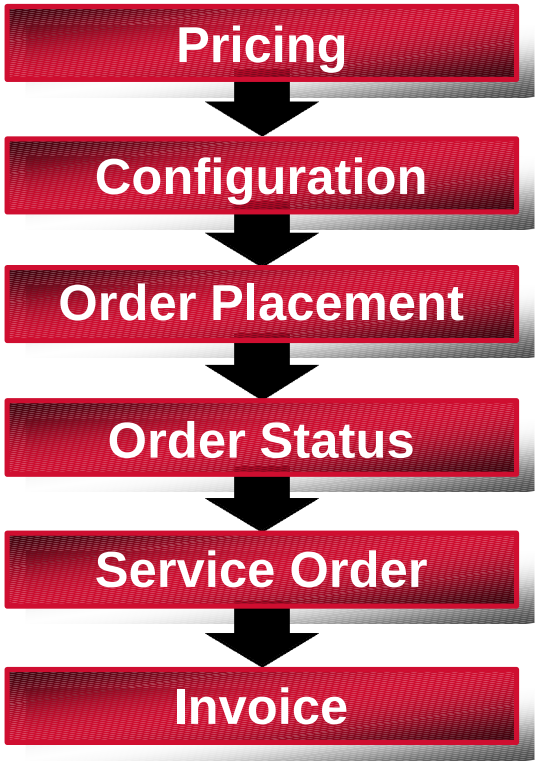
Satisfaction 4.17

- Over 70% questions handled on line.
- Dramatic growth—over 1.1million logins/month.
- 25% higher customer satisfaction.
- 98% accurate, on-time repair shipments.
- Annual savings of $365M:

Headcount	$75M
Software download	$250M
Document publication	$40M



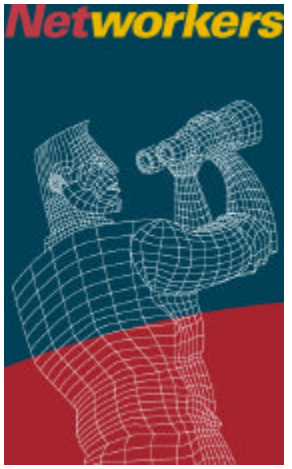
“Full Service” CCO Internet Commerce



I-Commerce Results

Registered Companies	1025
Orders per Day	US$15 Million
Yearly Run Rate	US$5.6 Billion
Satisfaction	4.2

Interactive Marketing



- Event & seminar registrations.
- Cisco product registration.
- CCO personal update.
- News release push.
- Publishing.
- Training registration.

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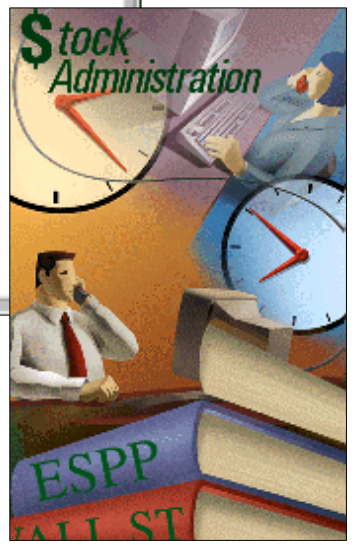
CCO Marketing Results

- In an average month:
  - 10,000+ products registered.
  - 24,000+ seminar registrations.
  - 20,000+ customer/partner event registrations.
  - 800+ CCO personal updates sent.
  - 2,500+ news releases pushed.
  - 500+ marketing documents published.
  - 25,000+ training classes searched.

Employee Services

Cisco Employee Connection

- **Employee services:**
  - **Travel/expense.**
  - **Benefits enrollment.**
  - **Training registration.**
  - **Stock information.**
  - **Internal IT help desk.**
  - **Directory and organization chart.**



METRO
Management of Expenses and Travel Reports On-line

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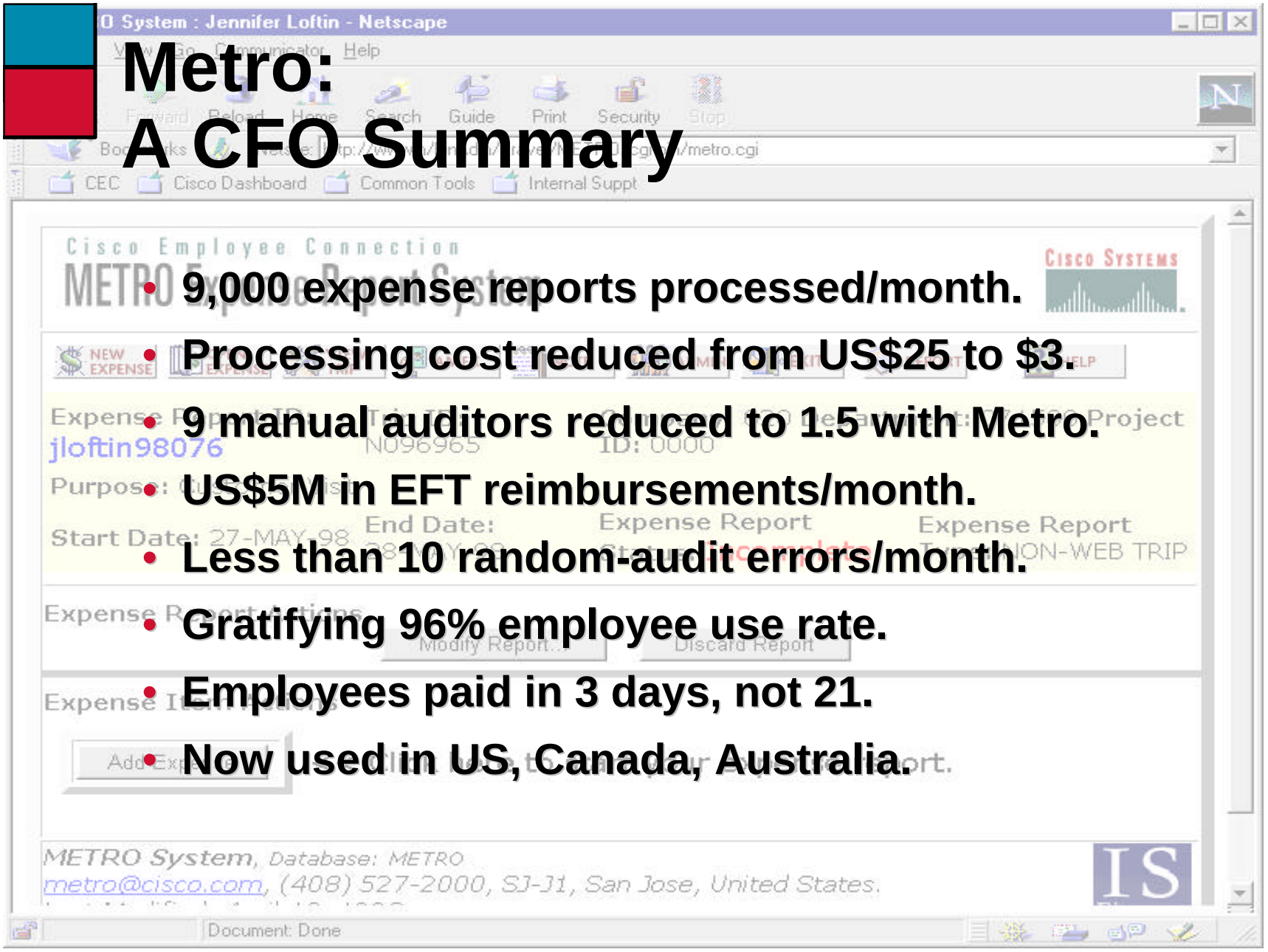
Metro:
A CFO Summary



- 9,000 expense reports processed/month.
- Processing cost reduced from US$25 to $3.
- 9 manual auditors reduced to 1.5 with Metro.
- US$5M in EFT reimbursements/month.
- Less than 10 random-audit errors/month.
- Gratifying 96% employee use rate.
- Employees paid in 3 days, not 21.
- Now used in US, Canada, Australia.

Communication/Collaboration

- **IP/TV for sales/product training.**
- **Company-wide employee meetings and broadcasts.**
- **Collaboration with suppliers for new product design.**
- **Stanford University Engineering courses online.**

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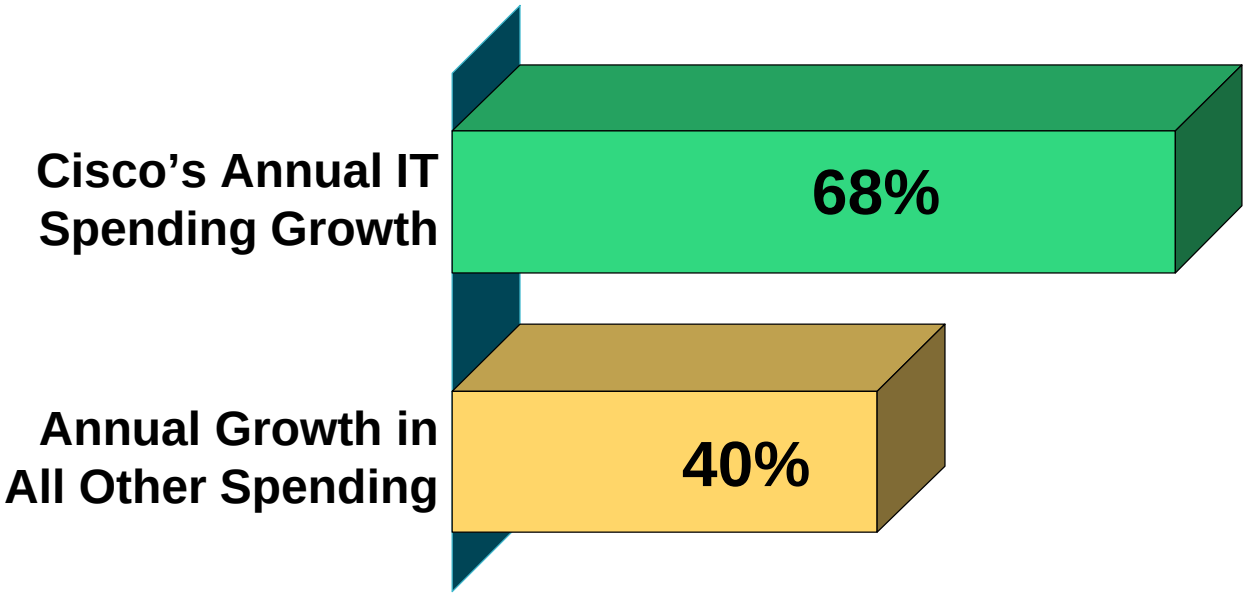
Summary Financial Impact of Internet Business in FY98

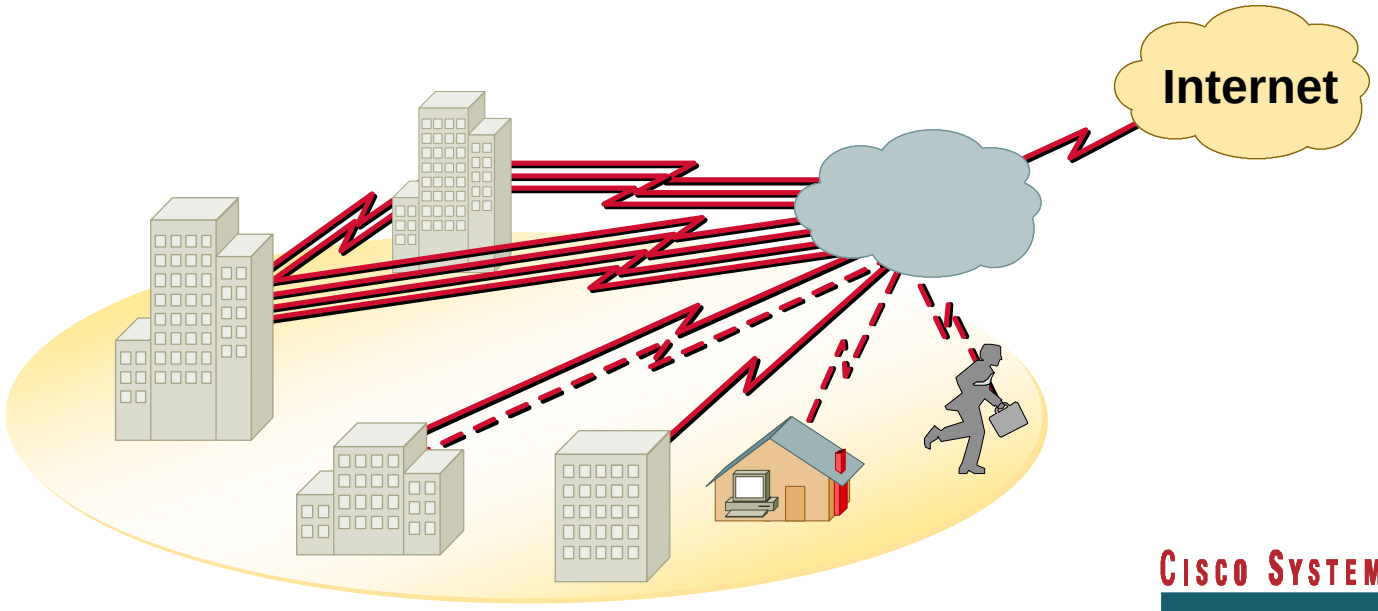
Business Process:	Financial Contribution:
Customer Care	
• Headcount Avoidance	$75,000,000
• Software Distribution	$250,000,000
• Document Publishing	$40,000,000
Internet Commerce	
• Headcount Avoidance	$12,000,000
Supply Chain Management	
• Reduced Operating Cost	75,000,000
• Increased Contribution	100,000,000
Employee Services	
• Online Hiring	$8,000,000
• Productivity Increase	$4,000,000
Total (audited internally by CFO):	$550,000,000

Cisco's Aggressive IT Investment Strategy

Relative Growth of IT vs. Other Spending
(1996–1998 CAGR)



Internet Economy: Reality Check



New Realities: Internet Economy

- **Competitive advantage will be more difficult to attain in the Internet Economy and even more difficult to sustain.**
- **Focus of Internet initiatives on critical business practices is necessary but not sufficient, because they are easily replicable.**
- **Internet initiatives and the business processes they impact need to be questioned constantly and continuously revisited (you're never done!).**
- **The Internet Economy requires companies and organizations to form relationships to compete.**
- **Early movers accrue advantages when they develop new products/services or create new business models, because they: get the best talent, build the best partnerships, secure a "good-will" premium.**

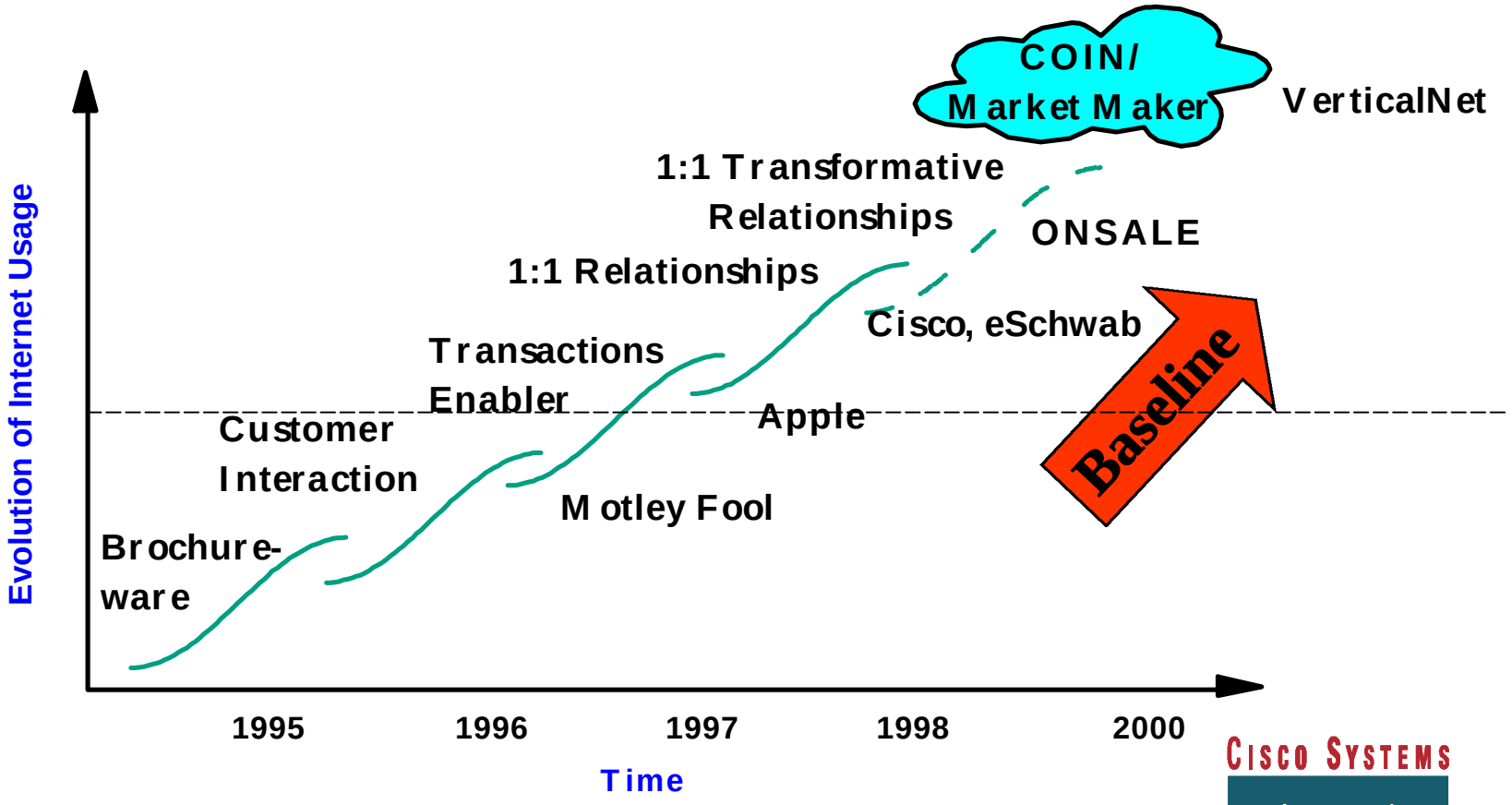
Drivers of Success

- Having a clear and customer-driven value proposition.
- Ruthless execution.
- Scalable solutions/infrastructure.
- Innovative Business Models.
  - Development of new practices.
- Vision Driven.
- Portfolio of solutions supporting articulated vision.
- “Real-time” Organization
  - Ability to identify and exploit opportunities quickly.
- Projects with continuous scope.
  - Recognition of need for ongoing development/modification.
- Evangelism + Hyperbole = Perceived Success.

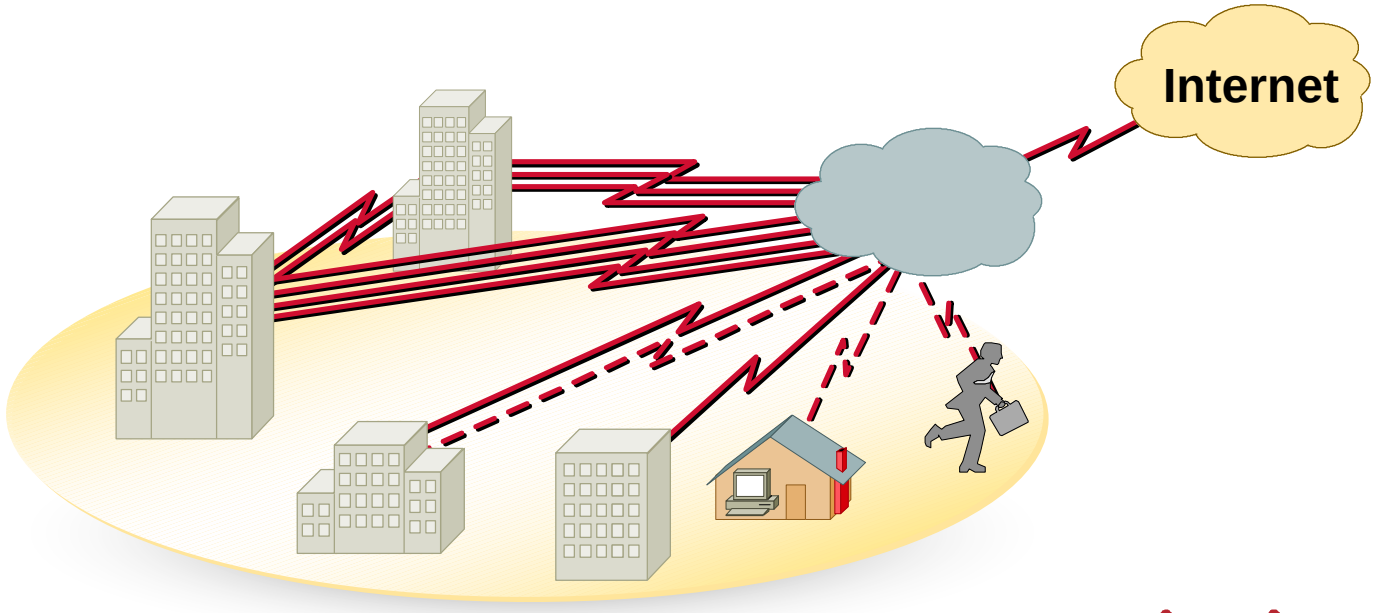
Barriers to Success (Drivers of Failure)

- Technology driven.
  - Letting capabilities of new technologies dictate moves.
- Inadequate application/network architecture.
  - Lack of scalable systems and solutions needed for growth.
- Legacy business models.
  - “Webifying” old business practices (bulldog with lipstick).
- Islands of webification.
  - Creation of discontinuous and non-synergistic applications.
- “Me too” strategies.
  - Copying or following the moves of others.
- Projects with finite scope.
  - Not realizing there is a continuing development effort.

Evolution of Internet Initiatives



Net-Readiness



Net-Readiness for Organizations

- Leadership.
- Governance / Operating Model.
- Technology.
- Competencies.

Leadership

- Is it clear who has decision authority on initiatives?
- Is there an E-Business mindset up/down our organization?
- Is generating competitive advantage via Internet technologies a top priority for senior management?
- Is there a team responsible for the strategic intent of initiatives?
- Are our Internet initiatives integrated with our business strategy?
- Is there a driving vision for our Internet initiatives?
- Is senior management attuned to the opportunities/threats enabled by the Internet?

Governance

- Are roles, responsibilities and accountability clearly defined?
- Is there an administrative process in place for initiatives?
- Do we have an established method for assessing and selecting Internet strategies?
- How do E-Business initiatives get funded?
- What drives our Internet initiatives—IT, marketing, customers, competitors?
- Do we have an established method for allocating resources for Internet initiatives?
- Do we have established metrics for measuring the impact of our Internet initiatives?
- Are we organized to effectively deliver our Internet initiatives?

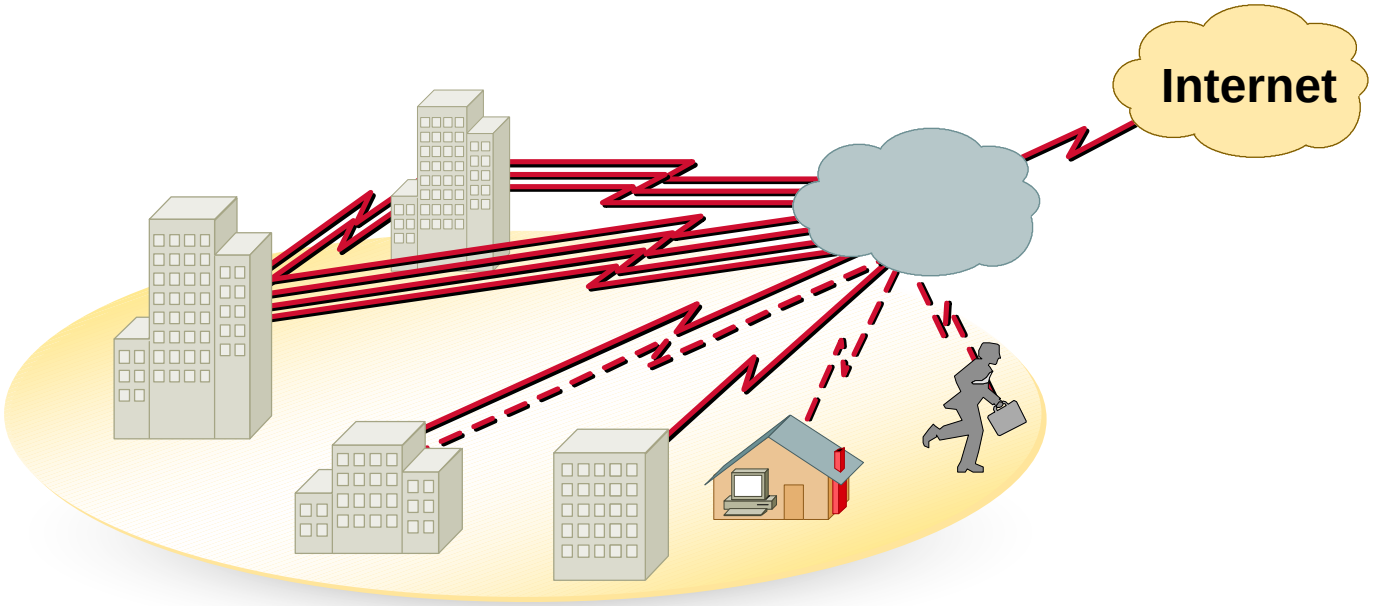
Technology

- Is this solution be flexible enough to accommodate change?
- Do we have the technical competencies to support Internet initiatives?
- Is this solution customizable to our and our customer needs?
- Do we have the technological infrastructure (network services, hardware, software) required to develop and scale?
- Do we have sufficient funding for ongoing web-site maintenance?
- Do we have operations capabilities required to support our Internet strategy?

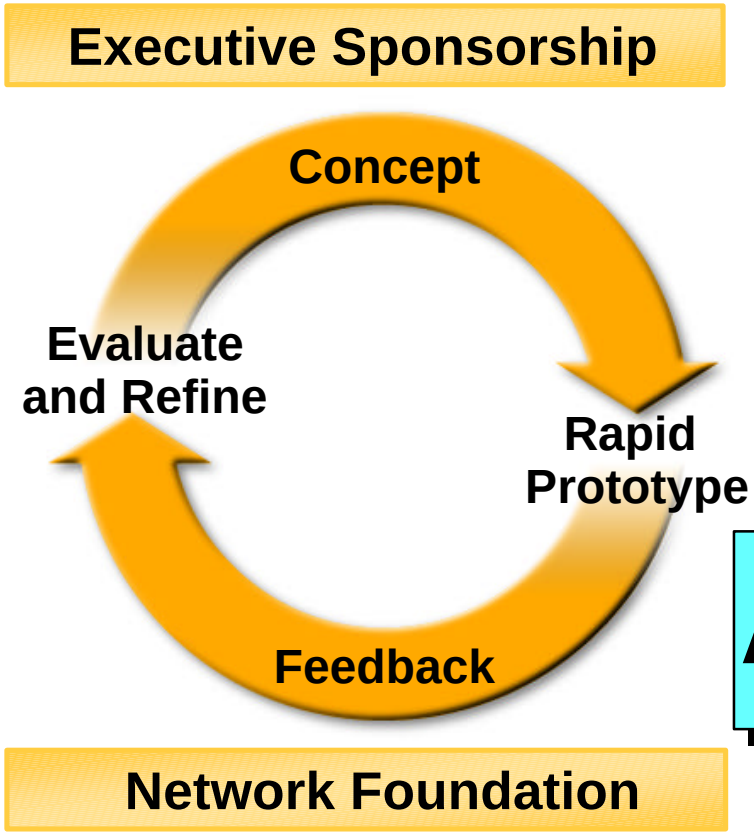
Organizational Competencies

- Do we have experience managing multiple relationships (both internal and external)?
- Can we form and dissolve relationships quickly?
- Do we have Internet-related consulting experience?
- Do we have experience selling services?
- Do we continually innovate our product & service offerings?
- How responsive to customer needs are we?
- Is the experience and skill set of our Internet team adequate?
- Can the organization and individuals learn quickly from experience?

Conclusion



Internet Economy: How to Get Started



- Executive sponsorship.
- Practical, tractable, high-payoff applications.
- Walk, trot, run, sprint.

Are you net-ready?

Cisco's Commitment: IP Dialtone for the 21st Century